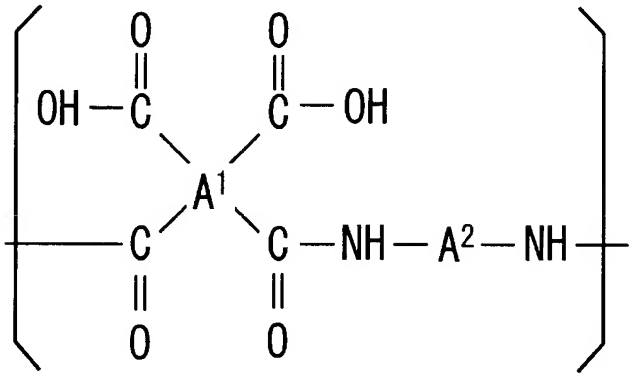
WHAT IS CLAIMED IS:

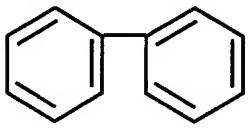
1. A resin composition containing an imidized polyimide precursor having a polymer structure unit represented by formula (1) below:



····· Formula (1)

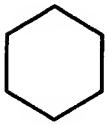
wherein the chemical structure represented by A^1 includes an aromatic compound and the chemical structure represented by A^2 includes an alicyclic compound, and a photosensitizer,

wherein the chemical structure represented by A^1 in formula (1) above is biphenyl represented by chemical formula (2) below:



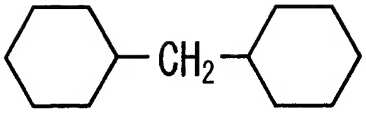
····· Chemical formula (2)

and the chemical structure represented by A^2 in formula (1) above is an alicyclic compound selected from either one of cyclohexane represented by chemical formula (3) below:



····· Chemical formula (3)

or 4,4'-methylenebiscyclohexane represented by chemical formula (4) below:



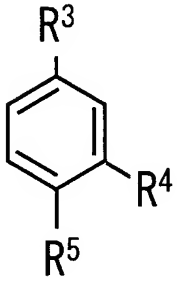
····· Chemical formula (4)

and wherein the polyimide precursor has an imidization degree of 7.5 % or more and 36 % or less as determined by equation (a) below:

Equation (a): $(PS_1/PS_2)/(PI_1/PI_2)$ X 100

wherein PS_1 and PI_1 represent the absorbances derived from the imide ring and PS_2 and PI_2 represent the absorbances derived from chemical structure A^2 in formula (1) above, and PS_1 and PS_2 represent the absorbances of the polyimide precursor to be tested for the imidization degree and PI_1 and PI_2 represent the absorbances of the polyimide precursor after complete imidization.

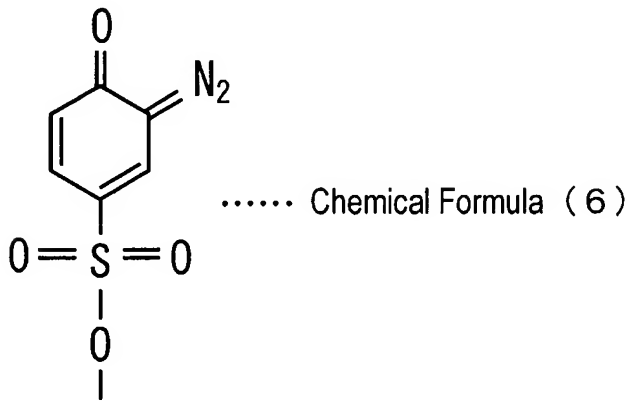
2. The resin composition of claim 1 wherein the photosensitizer is based on an o-quinone diazide compound represented by formula (5) below:



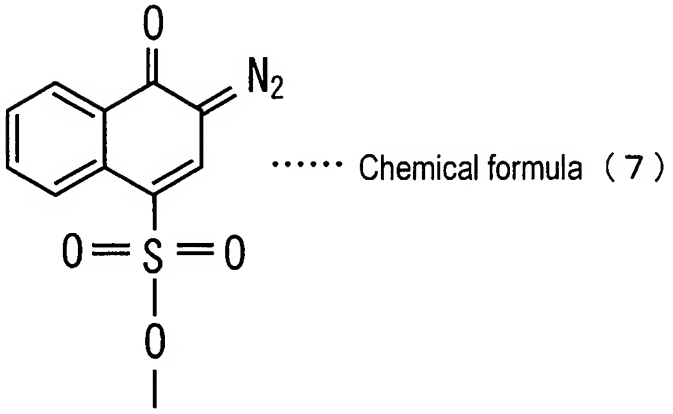
····· Formula(5)

wherein substituent R^3 represents any one of substituents selected from the group consisting of methyl, hydroxyl, methylketone, cyano and the substituents represented by chemical formulae (6)-(8) below, substituent R^4 represents any one of substituents selected from the group consisting of hydrogen and the substituents represented by chemical formulae (6)-(8) below, and substituent R^5 represents any

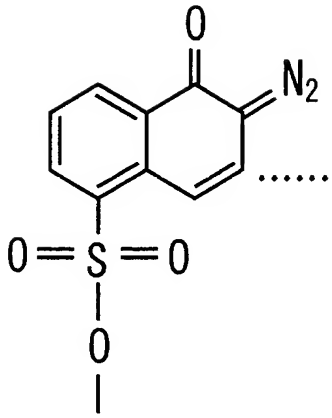
one of substituents selected from the group consisting of hydrogen and the substituents represented by chemical formulae (6)-(11) below, provided that at least one of substituents R^3- R^5 represents any one of substituents selected from the group consisting of the substituents represented by chemical formulae (6)-(8) below:



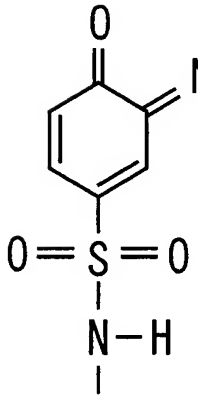
…… Chemical Formula (6)



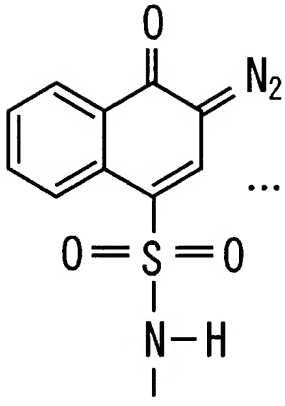
…… Chemical formula (7)



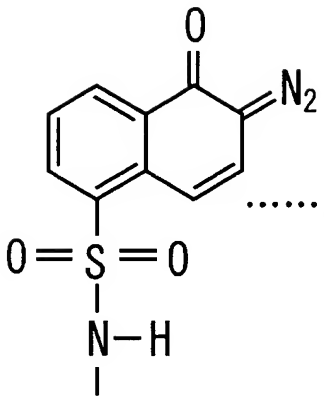
····· Chemical formula （８）



····· Chemical Formula （９）

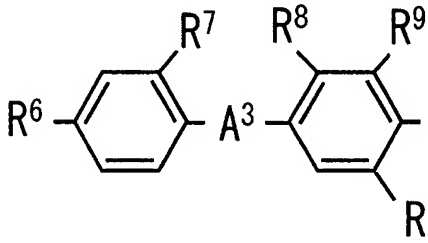


····· Chemical formula （１０）



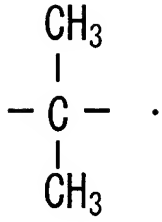
..... Chemical formula (1 1)

3. The resin composition of claim 1 wherein the photosensitizer is based on an o-quinone diazide compound represented by formula (12) below:

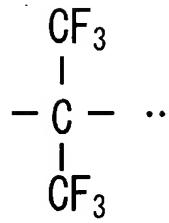


..... Formula (1 2)

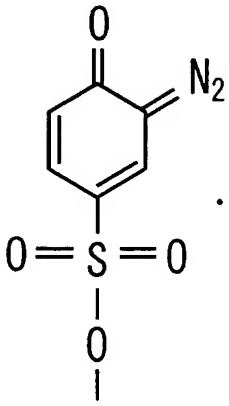
wherein chemical structure A^3 represents any one of chemical structures selected from the group consisting of oxygen, sulfonyl, ketone and the chemical structures represented by chemical formulae (13) and (14) below, and substituents R^6-R^{11} represent any one of substituents selected from the group consisting of hydrogen, hydroxyl and the substituents represented by chemical formulae (6)-(11) below, provided that at least one of substituents R^6- R^{11} represents any one of substituents selected from the group consisting of the substituents represented by chemical formulae (6)-(8) below:



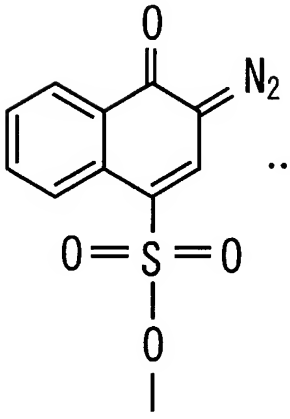
····· Chemical formula （１３）



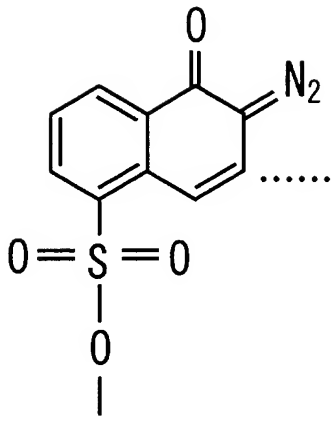
·····Chemical formula （１４）



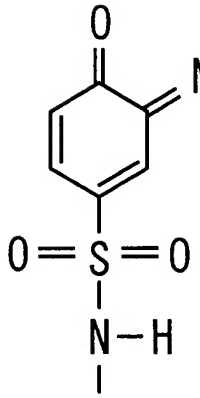
····· Chemical Formula （６）



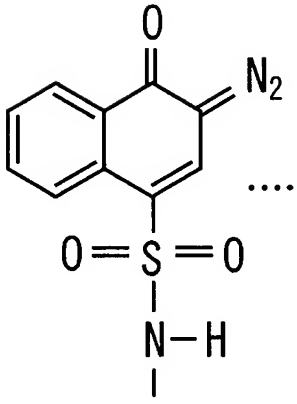
····· Chemical formula （７）



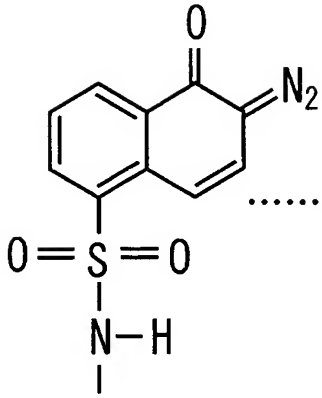
····· Chemical formula （８）



····· Chemical Formula （９）

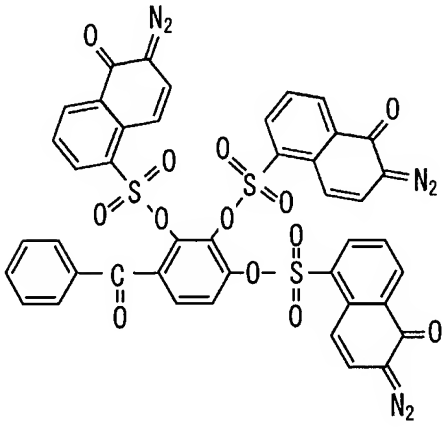


····· Chemical formula （１０）



····· Chemical formula (1 1)

4. The resin composition of claim 5 wherein the o-quinone diazide compound is 2,3,4-trihydroxybenzophenone o-naphthoquinone diazide sulfonic ester represented by chemical formula (15) below:

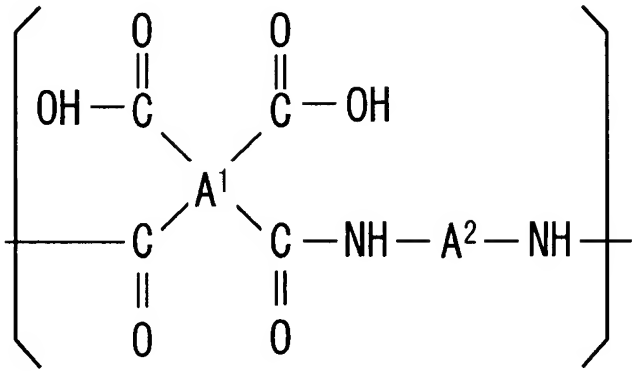


····· Chemical Formula (1 5)

5

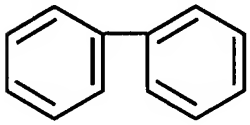
5. A process for forming a resin film comprising the steps of coating an object on which a resin film is to be formed with a resin composition containing a polyimide precursor having a polymer structure unit represented by formula (1) below and having an imidization degree of 7.5 % or more and 36 % or less and a photosensitizer to form a resin film, exposing the resin film to light to form a latent image, developing the resin film and heating

the resin film to imidize the polyimide precursor,



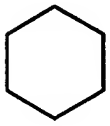
····· Formula (1)

wherein the chemical structure represented by A^1 is biphenyl represented by chemical formula (2) below:



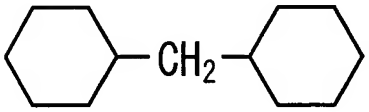
····· Chemical formula (2)

and the chemical structure represented by A^2 is an alicyclic compound selected from either one of cyclohexane represented by chemical formula (3) below:



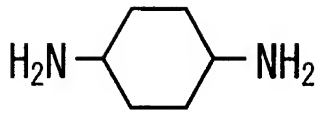
····· Chemical formula (3)

or 4,4'-methylenebiscyclohexane represented by chemical formula (4) below:



····· Chemical formula (4)

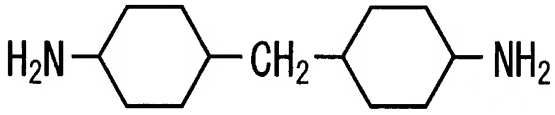
6. A process for preparing a resin composition comprising reacting 1,4-diaminocyclohexane represented by chemical formula (16) below:



·····Chemical formula (16)

with an aromatic dianhydride in a solvent to form a salt, reacting a resin solution containing the salt at a temperature of 80 °C or more and 150 °C or less, then reacting the resin solution at a temperature of 160 °C or more and 250 °C or less to a desired imidization degree and further adding a photosensitizer to the resin solution to give a resin composition.

7. A process for preparing a resin composition comprising reacting 4,4'-methylenebis(cyclohexylamine) represented by chemical formula (17) below:



·····Chemical formula (17)

with an aromatic dianhydride in a solvent to form a salt, reacting a resin solution containing the salt at a temperature of 80 °C or more and 150 °C or less, then reacting the resin solution at a temperature of 160 °C or more and 250 °C or less to a desired imidization degree and further adding a photosensitizer to the resin solution to give a resin composition.